



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

November 12, 2015

Mr. Michael Kellogg  
Agent for Tacoma Ag, LLC  
Tacoma Ag, LLC  
c/o Pyxis Regulatory Consulting, Inc.  
4110 136<sup>th</sup> St. NW  
Gig Harbor, WA 98332

Subject: Label Amendment – Corrections to application rates and removal of certain California restrictions consistent with EPA Reg No. 228-652  
Product Name: T-Methyl 4.5  
EPA Registration Number: 83520-33  
Application Date: 07/14/2015  
Decision Number: 507234

Dear Mr. Kellogg:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Lisa Pahl by phone at 703-347-0459, or via email at [pahl.lisa@epa.gov](mailto:pahl.lisa@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Shaja B. Joyner". The signature is fluid and cursive, with a distinct loop at the end.

Shaja B. Joyner, Product Manager 20  
Fungicide and Herbicide Branch  
Registration Division (7505P)  
Office of Pesticide Programs

Enclosure

# T-METHYL 4.5

## FUNGICIDE

### ACTIVE INGREDIENT:

Thiophanate-Methyl (Dimethyl [(1,2-phenylene)bis  
(iminocarbonothioyl)]bis[Carbamate])\*..... 46.2%

**OTHER INGREDIENTS:**..... 53.8%

**TOTAL:** ..... 100.0%

\*Also known as Dimethyl 4,4'-o-phenylenebis-[3-thioallophanate]  
Contains 4.5 Lbs. Thiophanate Methyl per gallon.

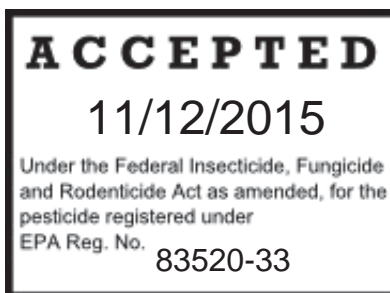
### KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<b>If Inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably mouth-to-mouth, if possible</li> <li>• Call a poison control center or doctor for further treatment advice</li> </ul>
<b>If on Skin or Clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes</li> <li>• Call a poison control center or doctor for treatment advice</li> </ul>
<b>If In Eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye</li> <li>• Call a poison control center or doctor for treatment advice</li> </ul>
<b>If Swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice</li> <li>• Have person sip a glass of water if able to swallow</li> <li>• Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>• Do not give anything to an unconscious person</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For general information on product use, etc., call the National Pesticides Information Center (NPIC) at 1-800-858-7378 Mon. - Fri. 8:00 am to 12:00 pm Pacific Time. For medical emergencies, call your poison control center at 1-800-222-1222.	

**EPA Reg. No. 83520-33**

**Manufactured for:**

Tacoma Ag, LLC  
P.O. Box 14073  
Durham, NC 27713



**EPA Est. No.**

**Net Contents:**

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Harmful if swallowed, inhaled or absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are Barrier Laminate Gloves, Nitrile Rubber Gloves  $\geq$  14 mils, or Viton Gloves  $\geq$  14 mils.

**Handlers mixing, loading and apply the product as a dip must wear:**

1. Coveralls over long-sleeved shirt and long pants
2. Chemical-resistant gloves
3. Chemical-resistant footwear plus socks
4. Chemical resistant apron

**All other mixers, loaders and applicators must wear:**

1. Long-sleeved shirt and long pants
2. Shoes plus socks
3. Chemical-resistant gloves (such as or made out of any waterproof material)
4. Chemical-resistant apron for mixers, loaders, and other handlers exposed to concentrate

**USER SAFETY REQUIREMENTS**

Follow manufacturer's instructions for cleaning/maintaining **PPE**. If no such instructions for washables exist, use detergent and hot water. Keep and wash **PPE** separately from other laundry. Discard clothing and other absorbant materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**ENGINEERING CONTROLS:** When handlers use enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in WPS.

**USER SAFETY RECOMMENDATIONS**

Users should:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing/**PPE** immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
3. Remove **PPE** immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

## DIRECTIONS FOR USE

**IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI).

The REI is 12 hours except as listed in the application rate tables below.

**Exemption:** If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

1. Coveralls over long sleeved shirt and long pants
2. Chemical-resistant gloves made of any waterproof material
3. Chemical-resistant footwear plus socks
4. Chemical-resistant headgear for overhead exposures

### PRODUCT INFORMATION

T-Methyl 4.5 may be applied by ground or aerial application equipment. Normal fungicide usage indicates this product will be applied over the top of the intended crop; it is critical to ensure that the tank and spray equipment has been cleaned of all other pesticides prior to mixing this product. As with all agricultural chemicals, continuous agitation is required to keep the ingredients in suspension. Recommended application gallonage and directions are given for each crop.

T-Methyl 4.5 may be tank mixed with other fungicides, insecticides and plant growth regulators that have been approved for use by the EPA on the intended crop. Tacoma Ag, LLC does not make any claims of compatibility with other pesticides; always perform a Mixing Jar Test prior to tank mixing. See **Compatibility Test** section on this label. Tank mixes of this product with highly alkaline pesticides like Bordeaux or lime sulfur is not recommended.

Most effective disease control is obtained by preventative spray timing as climatic conditions indicate fungal infection or growth is imminent. Always use the higher rates under conditions of severe disease pressure.

Use on non-bearing apples, pecans, cherries, and peaches: T-Methyl 4.5 may be used for control of the leaf diseases listed on the label for these crops during the non-bearing years of new plantings, and on nursery stock. All use directions and limitations must be followed, except for the PHI, which is not applicable. Begin applications as disease is first observed. Tank mixing with a protectant fungicide is strongly recommended for resistance management.

**High volume dilute applications:** Applicator should use the **PRODUCT per ACRE** rate for concentrate spray applications for tree crops (example: no more than 400 gallons on apples). When making dilute ground applications, use the **PRODUCT per 100 GALLONS** rate. Follow all crop specific language on this label for application. Dilute sprays must not exceed maximum a.i. per year.

**Aerial applications to tree crops:** Use a minimum of 10 gal/acre for aerial application to fruit tree crops. Increased fungicidal activity is related to coverage and timing, increased volumes are required as crop canopy density increases. NOTE: Conifer applications require higher spray volumes, use lower volumes with mist type applicators and highest volumes with conventional types.

**Row Crop applications:** Use a minimum of 5 gal/acre for ground application, however most ground applications should be made with 10 to 20 gal/acre as cropping situations dictate. Increased fungicidal activity is related to coverage and timing, increased volumes are required as crop canopy density increases.

**Plantback Restriction:** Do not plant any crop not labeled for T-Methyl 4.5 use within 30 days of the last application.

**Chemigation:** See specific directions in this label.

**Mode of Action:** T-Methyl 4.5 is a tubulin inhibitor fungicide falling into the FRAC Group 1 for Benzimidazoles. Its Mode of Action is the inhibition of microtubule assembly. It has protectant, systemic and curative actions, each of these specific to certain crops, fungi and climatic conditions.

**Fungicide Resistance:** Fungal pathogens have proven to develop a resistance to certain fungicide families and modes of action. These are called tolerant and resistant strains of fungi. Industry and university research have developed effective programs that continue to provide excellent control of these strains, however, precautions and specific steps should be taken to ensure effective fungicide rotation, tank mixing of different modes of action and disease monitoring are the keys of your fungicide program.

It is recommended that T-Methyl 4.5 be rotated or tank mixed with different modes of action fungicide chemistry. All products containing thiabendazole, thiophanate ethyl or carbendazim fungicides (benzimidazole fungicides) should NOT be considered rotation or tank mix partners.

Should T-Methyl 4.5 be applied as directed and the treatment is considered not to be effective, you may have encountered a resistant or tolerant fungi strain. Do not apply this mode of action chemistry again during this growing season, as this may enhance the resistance at this site. Consult with your local Cooperative Extension Service, University Research or Certified Crop Consultant for more information concerning fungicides effective on the tolerant or resistant strains encountered.

#### **MIXING INSTRUCTIONS**

Fill spray tank to half full, start agitation. See Mixing Order chart below when any other products are tank mixed with this product. **Be sure to shake product container well** before pouring to measure. Slowly pour required product into spray tank, then finish filling tank with water, all the while maintaining agitation. If there is any question as to the compatibility of the components, always perform a jar test with proportional amounts of each product, using water from the actual use source.

Always read and follow label directions of all products. The most restrictive label language will apply. Do not mix more spray solution than you plan to apply that day.

### Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test. For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature. Add components in the sequence indicated in the **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre. Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, do not mix the ingredients in the same tank.

### Mixing Order

(As each product is added to the tank, be sure it is completely dispersed before adding any other product to the mix. Maintain agitation throughout mixing and application processes.)

- 1) **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
- 2) **Agitation.** Maintain constant agitation throughout mixing and application.
- 3) **Inductor.** If an inductor is used, rinse it thoroughly after each component has been added.
- 4) **Products in PVA bags.** Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 5) **Water-dispersible products** (such as, dry flowables - DF, wettable powders - WP, wettable dry granules – WDG, suspension concentrates - SC, or suspo-emulsions - SE).
- 6) **Water-soluble products.**
- 7) **Emulsifiable concentrates** (such as oil concentrate when applicable).
- 8) **Water-soluble additives** (such as AMS or UAN when applicable).
- 9) **Remaining quantity of water.**

Maintain constant agitation during application.

### CHEMIGATION USE INSTRUCTION

CALIFORNIA ALLOWS USE BY CHEMIGATION ONLY FOR CROPS OF BEANS, CUCURBITS (CUCUMBERS, MELONS, PUMPKINS, SQUASH), PEANUTS, SOYBEANS, AND STRAWBERRIES.

### APPLICATION INFORMATION

Application of T-Methyl 4.5 should only be applied through the following types of irrigation systems:

Sprinkler irrigation systems: center pivot, lateral move, end tow, side roll

Traveler Type: big gun, solid set, or hand move

Drip Type: mini-micro sprinklers, strip tubing, trickle

Do not apply this product through any other type of irrigation system.

Note: any type of irrigation distribution of fungicide allowing untreated lapses or uneven distribution will result in poor control. Continually monitor calibration.

Irrigation equipment should be properly calibrated prior to addition of fungicide into water. Contact your equipment manufacturer, State Extension Service specialists or other experts should you need expertise. Effectiveness of this fungicide product depends on application uniformity and calibration. Crop injury and possible over application and illegal residues are possible from poor and non-uniform distribution.

Use of a chemigation system requires supervision by a person knowledgeable of the particular chemigation system and will be responsible for its operation. This supervisor is responsible for the system shutdown to make any necessary adjustments should the need arise.

No chemigation system should be connected to any public water system. A public water system is defined as a system for the provision of piped water for human consumption if such system has at least



15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

### **IRRIGATION / CHEMIGATION SYSTEM REQUIREMENTS**

Pressurized irrigation and pesticide injection system must meet the following requirements:

Must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located to prevent backflow contamination into the water source. The system must contain a functional, automatic, quick-closing check valve to prevent the backflow of any treated fluid. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. This valve must be connected to the system interlock and prevent fluid from being withdrawn from the supply tank in the event that the irrigation system is either automatically or manually shut down.

The system should be fitted with an automatic shut off for the pesticide injection pump when the water pump motor stops. This must be connected to the interlocking controls. The irrigation line and water pump must also be fitted with a low pressure shut off switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

A metering pump or positive displacement injection pump (e.g., diaphragm pump) designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock must be fitted to the system.

### **FUNGICIDE DILUTION MIX PREPARATION**

Chemical mix tank, induction lines, mixing and induction motors and pumps should all be cleaned of any prior use pesticide residues, scale or other foreign matter that may interfere with mixing or transfer of the pesticide dilution into the irrigation system. Flush with clean water.

Start by filling the mix tank at least ½ full. Begin agitation. Carefully add the required amount of T-Methyl 4.5 and then the rest of the water. Allow time to mix completely.

### **APPLICATION INSTRUCTIONS**

Observe ALL requirements in the System Requirements section above.

In order to ensure a uniform pesticide suspension and application, be sure to continuously agitate the fungicide tank-mixture during mixing and application.

Inject a greater volume of a more dilute suspension per unit time in order to achieve greater accuracy in distribution and calibration.

Do not apply more irrigation water per acre than recommended, decreased product performance may occur from the over diluted application.

Chemigation should not be attempted when wind speed favors drift. When system connections or fittings are seen to leak, chemigation should be stopped and the component repaired prior to restart. When nozzles are not providing uniform distribution, operator should recalibrate immediately. System should always remain in good repair.

When chemigation is completed, allow sufficient flush time for pesticide to be cleared from all nozzles and lines prior to shutting off the flow of irrigation water.

### **Fertilizer co-mix Instructions:**

You may mix and apply this product with other chemically-neutral liquid fertilizers. However, the applicator should be aware that mixing this product with highly alkaline fertilizers (such as aqueous ammonia) may cause problematic degradation of this product. Such a mix may prevent optimum control.

### **Sprinkler Irrigation Instructions:**

Observe all System Requirements and Application Instructions above.



Always observe local irrigation restrictions or ordinances.

Overhead irrigation systems should be repaired to block the spray jets or nozzles nearest the operations control panels as to not allow treated water to contact the operator or operation station.

Sprinkler system should be calibrated to deliver 0.1 to 0.25 inches of water per acre. Larger volumes of water may reduce product efficacy. Start sprinkler water flow, then begin injection of the mixed suspension of T-Methyl 4.5 into the irrigation water line. Continually monitor calibration to ensure proper application rate per acre. To ensure proper mixing of the suspension of T-Methyl 4.5 and the irrigation water, it should be injected with a positive displacement pump into the main line just ahead of a right angle pipe turn (violent water pressure shear).

After overhead chemigation treatment with T-Methyl 4.5 has been completed, treated area should not be irrigated again for at least 24 hours to prevent washing the fungicide off the crop leaves and canopy.

#### Drip Irrigation Instructions: (Mini-Micro Sprinklers, Strip Tubing, Trickle)

Observe all System Requirements and Application Instructions above.

### Crop Specific Directions for Use

CROP	PESTS	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
<b>Beans , dry &amp; succulent</b>  <b>Including:</b> Asparagus bean Broad bean Fava bean Garbanzo bean Kidney bean Lima bean Mung bean Navy bean Pinto bean Snap bean Wax bean Blackeyed pea Chick pea Cowpea Grain lupine Sweet lupine White lupine White Sweet Lupine	Anthrachnose <b>(Colletotrichum spp.)</b>  Gray Mold <b>(Botrytis spp.)</b>  White Mold <b>(Sclerotinia spp.)</b>	30-40 ounces	1.0 - 1.4 lb. AI per acre	<b>For one application:</b> Apply when 100% of plants have at least one open bloom or when conditions are favorable for disease development.
		20-30 ounces	0.7 – 1.0 lb. AI per acre	<b>For multiple applications:</b> Make first application when 10% - 30% of plants have at least one open bloom. Follow with additional applications at 4 to 7 day intervals. Apply prior to the development of disease for best results.
	<b>Restrictions For Use On Beans, dry &amp; succulent</b> Per crop year, apply no more than 80 oz. of this product per acre.  The Restricted Entry Interval (REI) for green beans is 1 day REI of 3 days for dried beans  <b>Pre-harvest Interval (PHI) (California)</b> = 14 days succulent beans, 28 days for lima beans & dry beans <b>PHI (all other states)</b> = 14 days for succulent and lima beans, 28 days for dry beans			

CROP	PESTS	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
<b>Cucurbits</b>  (Including: Cantaloupes, Casaba, Cucumbers, Melons, Pumpkins, Summer Squash and Winter Squash, and Watermelons)  *Not for this use in California	Acremonium / Cephalosporium Hypocotyl Rot	10 ounces	0.35 lb. AI per acre	Spray product in-furrow, on top of the seeds at planting using at least 10 gallons of water per acre.
	Anthracnose* ( <b>Colletotrichum spp.</b> ) Gummy Stem Blight* ( <b>Didymella spp.</b> ) Powdery Mildew ( <b>Erysiphe spp.</b> ) Target Spot* ( <b>Corynespora spp.</b> )		—	Scout fields as weather and conditions indicate infection could be present. Start treatments as plants begin to run or when disease is found. Repeat treatments at 7-14 day intervals.
			Max. AI per year 2.1 lb. per acre from all combinations and timings	Target Spot treatments should be made at 7- day intervals as needed.
	Belly Rots* ( <b>Rhizoctonia spp. and Fusarium spp.</b> )			Ensure application volume is sufficient to allow complete coverage to run or drip off plant into soil. This product is not effective in controlling Phytophthora spp. or Pythium spp.
	<u>Suppression</u> of Vine Decline ( <b>Monosporascus cannonballus</b> )  Charcoal Rot ( <b>Macrophomina spp.</b> )			Make applications for suppression of these diseases through buried drip irrigation lines (see chemigation section of this label) so to apply directly to the root zone. Start applications at emergence and continue at 14 day intervals until harvest.  Weekly or biweekly applications, beginning 4-6 weeks prior to harvest will offer some suppression, but will not be as effective as a season-long program.
<b>Restrictions for Use on Cucurbits</b> Do not apply more than 60 oz. of this product per acre per crop year. The REI is 1 day for all cucurbits. PHI = 1 day for all Cucurbits See <b>Fungicide Resistance</b> under <b>Product Information</b>				
<b>Garlic</b> (treatment for garlic cloves prior to planting)	Penicillium Clove Rot	Make a Suspension of 20 ounces per 100 gallons of water		Continuously agitate solution tank mixture to ensure proper treatment suspension ratio.  <b>Treatment:</b> Immerse garlic cloves in this suspension for no less than five minutes. Remove cloves from solution and allow to drain and dry. Once dry, cloves are ready for planting.

CROP	PESTS	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
<b>Onions*</b> Garlic (In Furrow)  *Not for this use in	White Rot* <b>(Sclerotinia spp.)</b>	1 ounce per 1000 row feet (with 12 inch row spacing) OR		Spray product solution directly into the open planting furrow at the time of planting seed, sets or bulbs.  REI of 3 days for garlic in furrow PHI = 0 days

California		40 ounces per acre Broadcast Max AI per year 1.4 lbs. per acre.		Do not apply through any type of irrigation system.
<b>Peanuts</b>	<p>Early Leaf Spot (<b>Cercospora spp.</b>)</p> <p>Late Leaf Spot (<b>Cercospora spp.</b>)</p> <p>Leaf Spot (<b>Cercospora spp.</b>)</p> <p>Limb Rot (<b>Rhizoctonia spp.</b>)</p> <p>Rust (<b>Puccinia spp.</b>)</p> <p>Web Blotch (<b>Ascochyta spp.</b>)</p>	<p>10 ounces per acre – single application</p> <p>Max AI per year 1.4 lbs. per acre</p>		<p>Start treatments when disease is verified or 35 days after planting. Repeat as needed at 14 day intervals.</p> <p>Utilize this product in conjunction with another non-benzimidazole fungicide.</p> <p>Per crop year, apply no more than 40 oz. of this product per acre.</p> <p>REI is 1 day</p> <p>PHI = 14 days</p> <p>See <b>Fungicide Resistance</b> under <b>Product Information</b></p>
<b>Potatoes</b>	White Mold ( <b>Sclerotinia sclerotiorum sp.</b> )	20-30 ounces	<p>_____</p> <p>Max single application rate of 1.05 lb AI per acre</p> <p>Max. AI per year 2.8 lb. per acre</p>	<p>Treatments are most efficacious when made prior to disease development.</p> <p>Start treatments just around time of row closure to full bloom of the primary flower clusters (prior to petal drop). Spray must cover all susceptible plant parts, branches, flowers and stems for adequate control. Scout and reapply at 7 to 14 day intervals or as conditions occur for disease development.</p> <p>Maximum annual application rate of 80 fl oz per acre.</p> <p>PHI = 21 days</p> <p>REI is 2 days</p> <p><b>Early/Late Blight Control:</b> You may tank-mix this product with other blight-control fungicides.</p> <p>Tacoma Ag, LLC does not recommend aerial application for control of this disease on this crop.</p>

CROP	PESTS	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
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Soybeans	Anthracnose ( <i>Colletotrichum</i> spp.)	10-20 ounces		Apply the first application at full bloom up until the pods are between 1/8" and 1/4" in length, followed by a second application 14-21 days thereafter. The second application must be made less than 14 days following bean formation or before average pod length is 1/4". When beans are under severe disease pressure, utilize the higher application rates.
	Brown Spot ( <i>Septoria</i> spp.)	Use higher rate for higher density canopy develops		FOR SEED BEANS ONLY- A single high-rate application may be made at the time of bean formation to improve seed quality.
	Frogeye Leaf Spot ( <i>Cercospora</i> spp.)			
	Pod and Stem Blight ( <i>Diaporthe</i> spp. and the imperfect stage, <i>Phomopsis</i> spp.)			
	Purple Seed Stain ( <i>Cercospora</i> spp.)			
	White Mold ( <i>Sclerotinia</i> spp.)	15-20 ounces		Apply the first application at early bloom (R-1 to R-2 stage). A second application may be made 14 days later as conditions dictate. Spray must cover all susceptible plant parts, branches, flowers and stems for adequate control. <b>Aerial Application:</b> Use at least 5 gallons water.
	Aerial Blight (Suppression)	20 ounces		First application must be made prior to infection, monitor climatic conditions and sentinel plots in your area. Reapply 14-21 days later if needed.
	Soybean Rust ( <i>Phakopsora pachyrhiza</i> )		<div>_____</div> <div>Max single application rate of 0.7 lb AI per acre</div> <div>Max. AI per year 1.4 lb. per acre for Soybeans</div>	It is highly recommended that a DMI/Triazole fungicide, such as tebuconazole be tank mixed for Soybean Rust. First application must be made at R-1 with the tank mix for control. Reapply as conditions warrant. Do not make more than 2 applications per year.
<b>Restrictions For Use on Soybeans</b> Per crop year, apply no more than 40 oz. of this product per acre. Do not graze or feed treated vines or hay to livestock. Applications later than 14 days after pods average ¼ inch in length are prohibited. The REI is 1 day. PHI = 21 days				

CROP	PESTS	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
<b>Strawberries</b>	Fruit Rot	15-20		Start treatments as blooming begins, repeat at

	<b>(Botrytis spp.)</b> Leaf Blight <b>(Dendrophoma spp.)</b> Leaf Scorch <b>(Diplocarpon spp.)</b> Powdery Mildew <b>(Sphaerotheca spp.)</b>	ounces  Use highest rate under severe conditions	_____ Max single application rate of 0.7 lb AI per acre  Max. AI per year 2.8 lb. per acre	7 to 10 day intervals. Apply at higher rates when severe disease pressure appears. Per crop year, apply no more than 80 oz. of this product per acre. The REI is 1 day. PHI = 1 day See <b>Fungicide Resistance</b> under <b>Product Information</b>
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CROP	PESTS	PRODUCT per ACRE	AI per ACRE	INSTRUCTIONS
Sugarbeets	Cercospora Leaf Spot (Cercospora spp.)	10-20 ounces  (in CA use 10 ounce rate)	_____  Max single application rate of 0.7 lb AI per acre (0.35 in CA)  Max. AI per year 2.1 lb. per acre	Apply first application prior to disease emergence, when environmental conditions are favorable for disease development. As required, apply a second application with a NON-benzimidazole fungicide within 14 days.  If tolerant or resistant strains are known to be in the area, a tank mix with a protectant type fungicide is recommended.  For areas east of the Rocky Mountains: Do not apply this product more than once per year for the pest Cercospora spp.
	Powdery Mildew (Erysiphe spp.)	10-20 ounces		Start treatments immediately, as disease is verified, follow with a NON-Benzimidazole fungicide as needed or within 14 days after. Tank mixes are recommended for this disease.
	<b>Restrictions For Use On Sugarbeets</b> Per crop year, apply no more than 60 oz. of this product per acre. PHI = 21 days REI is 1 day See <b>Fungicide Resistance</b> under <b>Product Information</b>			

CROPS	PESTS	PRODUCT per ACRE	OZ./100 GAL	INSTRUCTIONS
<b>Triticale</b>  <b>Wheat</b> (Fall Seeded in the states of Idaho, Oregon and Washington Only)	Eye Spot  Foot Rot  Strawbreaker <b>(Pseudocercospora spp.)</b>	20 ounces  _____ Max single rate of 0.7 lb AI per acre  Max yearly application rate of 0.7 lb AI per acre		Make applications after tillering but before stem elongation begins. Applications are allowed by ground or aerial means.  Make only one application per year.  Do not apply more than 20 fl oz per acre per crop year.  The REI is 24 hours.  PHI = 90 days (Do not cut hay within 90 days of application or allow livestock to graze in treated area prior to harvest)

TREE CROPS	PEST	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
<b>Almonds</b>	Brown Rot Blossom Blight ( <i>Monilinia spp.</i> ) Jacket Rot ( <i>Monilinia</i> , <i>Sclerotinia</i> , <i>Botrytis</i> ) Leaf Blight ( <i>Seimatosporium</i> ) Scab ( <i>Cladosporium spp.</i> )	20-30 ounces	0.7 –1.05 lb. AI per acre per application  Max. AI per year 2.1 lb. per acre		Make the initial application at pink bud and continued through the petal fall stage.  Pink Bud applications can be made alone for Brown Rot. However later applications for broad spectrum control and resistance management, should be tank mixed with labeled contact type, multi-site fungicides.  Per crop year, apply no more than 60 oz. of this product per acre.  The REI is 3 days. PHI is 1 day  See <b>Fungicide Resistance</b> under <b>Product Information</b>
<b>Apples</b>  *Not for this use in California	Apple Scab ( <i>Venturia spp.</i> ) Black Pox* ( <i>Helminthosporium papulosum</i> ) Black Rot ( <i>Botryosphaeria spp.</i> ) Brooks Fruit Spot ( <i>Mycosphaerella spp.</i> ) Flyspeck ( <i>Zygophiala spp.</i> ) Powdery Mildew ( <i>Podosphaera spp.</i> ) Sooty Blotch ( <i>Gloeodes spp.</i> ) White Rot* ( <i>Botryosphaeria spp.</i> )	15-20 ounces (except CA)  CA only 30 ounces	0.525 - 0.7 lb. AI per acre per application (except CA)  CA only 1.0 lb. AI per acre	3.75 - 5 ounces (except CA)  CA only 7.5 ounces	Make the initial application at the green tip stage and continue at 5 day intervals during flowering and at 10 day intervals continuing through petal fall.  Apply cover sprays at 7 to 14 day intervals as needed.  Per crop year, apply no more than 80 oz. of this product per acre. The REI is 2 days. PHI = 1 day  See <b>Fungicide Resistance</b> under <b>Product Information</b>

TREE CROPS	PEST	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
<b>Apricots</b>	Brown Rot ( <i>Monilinia spp.</i> ) Blossom Blight ( <i>Monilinia spp.</i> ) Fruit Brown Rot ( <i>Monilinia spp.</i> )	20-30 ounces  (in CA use 30 oz)	0.7 - 1.05 lb. AI per acre  Max. AI per year 2.8 lb. per acre	6.7 - 10 ounces	Make the initial application at early bloom (red bud), followed by a second application at full bloom.  Under severe disease pressure, make additional applications at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays.  Per crop year, apply no more than 80 oz. of this product per acre. The REI is 2 days. PHI = 1 day See <b>Fungicide Resistance</b> under <b>Product Information</b>

TREE CROPS	PEST	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
<b>Cherries (Sweet and Sour)</b>	Brown Rot ( <i>Monilinia spp.</i> ) Blossom Blight ( <i>Monilinia spp.</i> ) Fruit Brown Rot ( <i>Monilinia spp.</i> )	20-30 ounces  (in CA use 30 oz)	0.7 - 1.05 lb. AI per acre  Max AI per year 2.8 Lb per acre	6.7- 10 ounces	Make initial application at early bloom (popcorn stage), followed by a second application at full bloom.  Under severe disease pressure, make additional applications at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays.
	Cherry Leaf Spot ( <i>Coccomyces spp.</i> )	22.5-30 ounces	0.7 - 1.05 lb. AI per acre  Max AI per year 2.8 Lb per acre	7.5-10 ounces	Initiate applications as leaves begin to unfold, near petal fall or before. Continue at first, second and third cover sprays at 10 to 14 day intervals.
	Powdery Mildew ( <i>Podosphaera spp.</i> ) and ( <i>Sphaerotheca spp.</i> )	20-30 ounces  (in CA use 30 oz Rate)	0.7 - 1.05 lb. AI per acre  Max AI per year 2.8 Lb per acre	6.7-10 ounces	Make initial application at early bloom (popcorn stage), followed by a second application at full bloom. .



TREE CROPS	PEST	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
		<b>PLUS</b> 22.5-30 ounces	<b>PLUS</b> 0.79 – 1.05 ounces	<b>PLUS</b> 7.5-10 ounces	<b>PLUS</b> Also make applications of this product at shuck fall and first cover.
	Per crop year, apply no more than 80 oz. of this product per acre. The REI is 2 days. PHI = 1 day See <b>Fungicide Resistance</b> under <b>Product Information</b>				

TREE CROPS	PEST	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
<b>Nectarines</b>	Brown Rot ( <i>Monilinia spp.</i> ) Blossom Blight ( <i>Monilinia spp.</i> ) Fruit Brown Rot ( <i>Monilinia spp.</i> )	20-30 ounces  (in CA use 30 oz)	0.7 - 1.05 lb. AI per acre  _____ Max. AI per year 2.8 lb. per acre	6.7 - 10 ounces	Make the initial application at early bloom (pink bud), followed by a second application at full bloom.  Under severe disease pressure, make additional applications at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays.  Do not apply more than 80 oz. of this product per acre per crop year. The REI is 2 days. PHI = 1 day See <b>Fungicide Resistance</b> under <b>Product Information</b>
<b>Peaches</b>	Brown Rot ( <i>Monilinia spp.</i> ) Blossom Blight ( <i>Monilinia spp.</i> ) Fruit Brown Rot ( <i>Monilinia spp.</i> )  Peach Scab ( <i>Cladosporium spp.</i> )	20-30 ounces  (in CA use 30 oz)  20-30 (in CA use 30 oz plus 22.5-30)	0.7 - 1.05 lb. AI per acre  _____ Max. AI per year 2.8 lb. per acre	6.7 - 10 ounces  6.7-10 oz plus 7.5-10	Make the initial application at early bloom (pink bud), followed by a second application at full bloom.  Under severe disease pressure, make additional applications at 10 to 14 day intervals beginning at full bloom, through final pre-harvest sprays.  Do not apply more than 80 oz. of this product per acre per crop year. The REI is 2 days. PHI = 1 day See <b>Fungicide Resistance</b> under <b>Product Information</b>
<b>Pecans</b>	Brown Spot ( <i>Cercospora spp.</i> ) Downy Spot ( <i>Mycosphaerella spp.</i> ) Liver Spot ( <i>Gnomonia spp.</i> ) Powdery Mildew	20 ounces	0.7 lb. AI per acre  _____ Max. AI per year		Make the initial application as leaves begin to show. Minimum retreatment interval of 21 days until shuck split. Do not apply after shuck split.  Use highest rates for aerial applications in AR, GA, LA, MS, OK,

	<p>(<i>Microsphaerella</i> spp.) Scab</p> <p>(<i>Fusicladium</i> spp.) Stem End Blight</p> <p>(<i>Botryosphaeria</i> spp.) Zonate Leaf Spot</p> <p>(<i>Cristulariella</i> spp.)</p>		2.1 lb. per acre		<p>TX.</p> <p>Per crop year, apply no more than 60 oz. of this product per acre.</p> <p>The REI is 3 days</p> <p>PHI = 1 day</p> <p>See <b>Fungicide Resistance</b> under <b>Product Information</b></p>
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TREE CROPS	PEST	PRODUCT per ACRE	AI per ACRE	PRODUCT per 100 GAL	INSTRUCTIONS
<b>Pistachios</b>	Shoot Blight ( <i>Botrytis</i> spp. and <i>Botryosphaeria</i> spp.)	30-40 ounces	1.05 – 1.4 lb. AI per acre   Max. AI per year 1.4 lb. Per acre		<p>Make application at bloom.</p> <p>Ground application: apply at least 100 gallons per acre</p> <p>Aerial application: apply at least 20 gallons per acre and applicator should fly directly over every row of trees.</p> <p>Per crop year, apply no more than 40 oz. of this product per acre.</p> <p>REI is 3 days</p> <p>See <b>Fungicide Resistance</b> under <b>Product Information</b></p>
<b>Plums / Prunes</b>	<p>Brown Rot (<i>Monilinia</i> spp.)</p> <p>Blossom Blight (<i>Monilinia</i> spp.)</p> <p>Fruit Brown Rot (<i>Monilinia</i> spp.)</p> <p>-----</p> <p>Black Knot (<i>Dibotryon</i> spp.)</p> <p>-----</p> <p>Leaf Spot (<i>Coccomyces</i> spp.)</p>	<p>20-30 ounces</p> <p>(in CA use 30 oz)</p> <p>-----</p> <p>20-30 ounces</p> <p>(in CA, use 30 ounces)</p> <p>-----</p> <p>20-30 ounces</p> <p>(in CA use 30 oz)</p>	<p>0.7 - 1.05 lb. AI per acre</p> <p>-----</p> <p>0.7 - 1.05 lb. AI per acre</p> <p>-----</p> <p>- 0.7 - 1.05 lb. AI per acre</p> <p>-----</p> <p>Max. AI per year 2.8 lb. per acre</p>	<p>6.7 - 10 ounces</p> <p>-----</p> <p>6.7 - 10 ounces</p> <p>-----</p> <p>6.7 - 10 ounces</p>	<p>Make the initial application at early bloom (green tip), followed by a second application at full bloom. Do not apply after shuck split</p> <p>Under severe disease pressure, make additional applications at 10 to 14 day intervals beginning at full bloom, through final <u>pre-harvest sprays</u>.</p> <p>Initiate applications before bloom, then at petal fall and first 3 cover sprays at 10 to 14 day intervals.</p> <p>-----</p> <p>Initiate applications as leaves begin to unfold, near petal fall or before. Continue at first, second and third cover sprays at 10 to 14 day intervals.</p>
<p><b>Restrictions For Use On Plums/Prunes</b></p> <p>Do not apply more than 80 oz. of this product per acre per crop year.</p>					

	Do not apply after shuck split. The REI is 2 days. PHI = 1 day See <b>Fungicide Resistance</b> under <b>Product Information</b>
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TREE CROPS	PESTS	MINIMUM PRODUCT/Acre & GALLONAGE per APPLICATION	INSTRUCTIONS
<b>CONIFER spp.</b>  <b>(Pines)</b> <b>Austrian Pine</b> <b>Christmas Trees</b> <b>Red Pine</b> <b>Scots Pine</b>  *not for Conifer use in CA	Tip Blight <b>(Diplodia spp.)</b>	20 ounces product/acre applied in at least 100 gal/acre	<p>Make the initial application at bud break, followed by a second application shortly prior to needle emergence, usually 10-14 days after bud break. A third application may be made approximately two weeks following needle emergence.</p> <p>Coverage may improve by adding a spreader/sticker.</p> <p>Do not apply more than 60 ounces of product per year.</p> <p>Do not allow livestock to graze treated area.</p> <p><b>REI OF 12 HOURS FOR CONIFERS</b></p>
<b>(Fir)</b> <b>Douglas</b>	Rhabdocline Needle Cast  Swiss Needle Cast <b>(Phaenocarpa spp.)</b>	20 ounces product/acre applied in at least 50 gal/acre	<p>Make the initial application near the beginning of May, followed by applications every four (4) weeks.</p> <p>Coverage may improve by adding a spreader/sticker.</p> <p>When using mist-blower types of sprayers, use minimum gallonage while using higher gallonage with conventional sprayers.</p> <p>Do not apply more than 100 ounces of product per year.</p> <p>Do not graze treated area.</p> <p><b>REI OF 12 HOURS FOR CONIFERS</b></p>

SEEDLING TREATMENT	PESTS	MIX RATIO	INSTRUCTIONS
<b>Longleaf Pine</b>	Brown Needle Blight <b>(Scirrhia spp.)</b>	1.25 oz of Product to 9.5 ounces dry Kaolin clay for seedling roots	<p>Do not apply T-Methyl 4.5 to seedling foliage.</p> <p>Prior to application, immerse the roots of the seedlings in clean water. The roots may then</p>

<b>Loblolly Pine</b> <b>Longleaf Pine</b> <b>Slash Pine</b>	Fusarium spp. and Rhizoctonia Root Rot	2.5 oz Product to 50 ounces Kaolinite clay, add enough water to make a slurry	be treated with a mixture of Kaolinite and this product.  While treating seedlings, DO NOT ALLOW EXCESSIVE DRYING OF ROOTS or exposure to freezing temperatures or temperatures greater than 90°F.  This product is not effective in controlling the pest Phytophthora spp. or Pythium spp.
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## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store this product in a cool, dry place in its original container only. Do not store this product near fertilizers, seeds, or other pesticides. If this product is spilled, you should sweep up the spillage and dispose pursuant to the below Pesticide Disposal instructions.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### CONTAINER DISPOSAL:

#### Nonrefillable containers less than or equal to 5 gallons:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

#### Nonrefillable containers greater than 5 gallons:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container, (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Offer for recycling, if available, or dispose of empty containers in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

### Refillable Containers:

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or a rinsate collection system. Repeat this procedure two more times.

## Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

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### **Warranty Disclaimer**

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Tacoma Ag, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, TACOMA AG, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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### **Inherent Risks of Use**

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It is impossible to eliminate all risks associated with use of this product. Unintended consequences may result because of such factors as use of the product contrary to label instructions, presence of other materials, or other factors, all of which are beyond the control of Tacoma Ag, LLC or the seller. To the extent consistent with applicable law, all such risks shall be assumed by buyer.

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### **Limitation of Remedies**

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The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Tacoma Ag, LLC election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent consistent with applicable law, Tacoma Ag, LLC shall not be liable for losses or damages resulting from handling or use of this product unless Tacoma Ag, LLC is promptly notified of such loss or damage in writing. In no case, to the extent consistent with applicable law, shall Tacoma Ag, LLC be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Tacoma Ag, LLC or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

EPA approval date